

AMENDMENTS TO THE CLAIMS

Listing of the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

1-15. (Canceled)

16. (Currently Amended) A method for supplying a dialyser of a dialysis unit with a dialysing fluid, the method comprising:

making available at least one dialysing fluid concentrate in at least one receiving unit;

making available water for diluting the at least one dialysing fluid concentrate;

mixing the at least one dialysing fluid concentrate and the water in a first pre-set volumetric ratio to prepare the dialysing fluid; and

setting a dialysing fluid flow rate Q_d over a pre-set treatment time T_B at a value, which depends upon the presence of a pre-set volume of the at least one dialysing fluid concentrate at a commencement of a dialysis treatment time, the first pre-set volumetric ratio, and the pre-set treatment time T_B during the dialysis treatment, such that at the end of the dialysis treatment time the at least one receiving unit is either empty or contains a pre-set residual volume of the at least one dialysing fluid concentrate,

wherein the at least one receiving unit contains only said at least one dialysing fluid concentrate.

17. (Previously Presented) The method of claim 16, further comprising:

determining the pre-set dialysing fluid flow rate Q_d before the commencement of the dialysis treatment from the pre-set volume of the at least one dialysing fluid concentrate at the commencement of the dialysis treatment time, the first pre-set volumetric ratio, and the pre-set treatment time T_B during the dialysis treatment.

18. (Previously Presented) The method of claim 16, further comprising:

testing the dialysis unit before the commencement of the dialysis treatment time, the testing comprising:

determining a volume of the at least one dialysing fluid concentrate in the at least one receiving unit before the commencement of the dialysis treatment time over a pre-set time interval T_{test} from the pre-set volume of the at least one dialysing fluid concentrate at the commencement of the dialysis treatment time and a volume of the at least one dialysing fluid concentrate used during the pre-set time interval T_{test} .

19. (Currently Amended) A method for supplying a dialyser of a dialysis unit with a dialysing fluid, wherein a dialysis treatment time equals a pre-set time interval T_{B1} plus a remaining dialysis treatment time T_{B2} , the method comprising:

making available at least one dialysing fluid concentrate in at least one receiving unit;
making available water for diluting the at least one dialysing fluid concentrate;
mixing the at least one dialysing fluid concentrate and the water in a first pre-set volumetric ratio to prepare the dialysing fluid; and

supplying the dialysing fluid to the dialyser at a pre-set dialysing fluid flow rate $Q_{d_{b1}}$ over the pre-set time interval T_{B1} such that an amount of the at least one dialysing fluid concentrate remaining in the at least one receiving unit at the end of the pre-set time interval T_{B1} can be calculated from the pre-set volume of the at least one dialysing fluid concentrate at the commencement of the dialysis treatment time and an amount of the at least one dialysing fluid concentrate used up during the dialysis treatment time; and

setting a dialysing fluid flow rate Q_{d_v} over the remaining dialysis treatment time T_{B2} which depends upon a volume of the at least one dialysing fluid concentrate in the at least one receiving unit at the end of the pre-set time interval T_{B1} , the first pre-set volumetric ratio, and the remaining dialysis treatment time T_{B2} , such that at the end of the dialysis treatment the at least one receiving unit is either empty or contains the pre-set residual volume of the at least one dialysing fluid concentrate,

wherein the at least one receiving unit contains only said at least one dialysing fluid concentrate.

20. (Previously Presented) The method of claim 17, wherein at the end of the pre-set treatment time T_B the at least one receiving unit contains the pre-set residual volume of the at least one dialysing fluid concentrate, the method further comprising:

discharging the pre-set residual volume of the at least one dialysing fluid concentrate to waste.

21. (Previously Presented) The method of claim 20, further comprising:

diluting the pre-set residual volume of the at least one dialysing fluid concentrate with water in a second pre-set volumetric ratio before the pre-set residual volume is discharged to waste.

22. (Previously Presented) The method of claim 17, wherein at the end of the pre-set treatment time T_B the at least one receiving unit is empty.

23. (Currently Amended) An apparatus for supplying a dialyser of a dialysis unit with a dialysing fluid, the apparatus comprising:

at least one receiving unit for receiving only at least one dialysing fluid concentrate;
means for providing water for a dilution of the at least one dialysing fluid concentrate;
means for mixing the at least one dialysing fluid concentrate and the water in a first pre-set volumetric ratio to prepare the dialysing fluid, said means for mixing connected to the at least one receiving unit and configured to receive the at least one dialysing fluid concentrate therefrom;

a control and calculating unit configured to set a dialysing fluid flow rate Q_{d_b} during a dialysis treatment such that at the end of the pre-set treatment period T_B , the at least one receiving unit is either empty or contains a pre-set residual volume of the at least one dialysing fluid concentrate;

wherein the dialysing fluid flow rate Q_{d_b} is dependent upon a pre-set volume of the at least one dialysing fluid concentrate at a commencement of a dialysis treatment period, the first pre-set volumetric ratio, and the pre-set treatment period T_B .

24. (Previously Presented) The apparatus of claim 23, wherein the control and calculating unit is configured such that a dialysing fluid flow rate Q_{d_b} is determined before the commencement of the dialysis treatment period from the pre-set volume of the at least one

dialysing fluid concentrate at the commencement of the dialysis treatment period, the first pre-set volumetric ratio, and the pre-set treatment period T_B ,

wherein the control and calculating unit is configured to set the dialysing fluid flow rate Q_{d_b} over the pre-set treatment period T_B such that at the end of the pre-set treatment period T_B , the at least one receiving unit is either empty or contains the pre-set residual volume of the at least one dialysing fluid concentrate.

25. (Previously Presented) The apparatus of claim 23, wherein the control and calculating unit is configured to test the apparatus over a pre-set time interval T_{test} before the commencement of the dialysis treatment period, and

wherein the control and calculating unit is configured to determine a volume of the at least one dialysing fluid concentrate in the at least one receiving unit from the pre-set volume of the at least one dialysing fluid concentrate at the commencement of the dialysis treatment period and a volume of the at least one dialysing fluid concentrate used during the pre-set time interval T_{test} .

26. (Currently Amended) An apparatus for supplying a dialyser of a dialysis unit with a dialysing fluid, wherein a dialysis treatment period equals a pre-set time interval T_{B1} plus a remaining dialysis treatment period T_{B2} , the apparatus comprising:

at least one receiving unit for receiving only at least one dialysing fluid concentrate;
means for providing water for a dilution of the at least one dialysing fluid concentrate;
means for mixing the at least one dialysing fluid concentrate and the water in a first pre-set volumetric ratio to prepare the dialysing fluid, said means for mixing connected to the at least one receiving unit and configured to receive the at least one dialysing fluid concentrate therefrom;

a control and calculating unit configured to supply the dialysing fluid to the dialyser at a pre-set dialysing fluid flow rate $Q_{d_{b1}}$ over the pre-set time interval T_{B1} such that an amount of the at least one dialysing fluid concentrate remaining in the at least one receiving unit at the end of the pre-set time interval T_{B1} can be determined from the pre-set volume of the at least one dialysing fluid concentrate at the commencement of the dialysis treatment period and an amount of the at least one dialysing fluid concentrate used up during the dialysis treatment period, and

wherein the control and calculating unit is configured to set a dialysing fluid flow rate Q_{d_v} over the remaining dialysis treatment period T_{B2} which depends upon a volume of the at least one dialysing fluid concentrate in the at least one receiving unit at the end of the pre-set time interval of the dialysis treatment T_{B1} , the first pre-set volumetric ratio, and the remaining dialysis treatment period T_{B2} , such that at the end of the dialysis treatment period, the at least one receiving unit is either empty or contains the pre-set residual volume of the at least one dialysing fluid concentrate.

27. (Previously Presented) The apparatus of claim 24, further comprising:

means for discharging the pre-set residual volume of the at least one dialysing fluid concentrate to waste via a waste discharge outlet;

wherein at the end of the pre-set treatment period T_B the at least one receiving unit contains the pre-set residual volume of the at least one dialysing fluid concentrate, and

wherein the control and calculating unit is configured such that at the end of the pre-set treatment period T_B , the pre-set residual volume is capable of being discharged to the waste discharge outlet.

28. (Previously Presented) The apparatus of claim 27, further comprising:

means for mixing the pre-set residual volume of the at least one dialysing fluid concentrate with water in a second pre-set volumetric ratio;

wherein the control and calculating unit is configured such that the pre-set residual volume is capable of being diluted with water before the pre-set residual volume is discharged to the waste discharge outlet.

29. (Previously Presented) The apparatus of claim 24, wherein at the end of the pre-set treatment period T_B , the at least one receiving unit is empty.

30. (Previously Presented) The apparatus of claim 23, further comprising:

means for inputting data relevant to the pre-set volume of the at least one dialysing fluid concentrate at the commencement of a dialysis treatment period, the first pre-set volumetric ratio, and the pre-set treatment period.

31. (Previously Presented) The method of claim 17, further comprising:
maintaining the pre-set dialysing fluid flow rate Q_{d_b} over the entire treatment time.
32. (Previously Presented) The method of claim 17, further comprising changing the dialysing fluid flow rate Q_{d_b} at least once during the treatment time.
33. (Previously Presented) The method of claim 19, wherein the dialysis treatment time equals the pre-set treatment time T_B plus an extra time interval T_v .
34. (Previously Presented) The method of claim 33, wherein T_B is greater than T_{B1} .
35. (Previously Presented) The apparatus of claim 23, wherein the at least one receiving unit comprises two receiving units.
36. (Previously Presented) The method of claim 19, wherein at the end of the remaining dialysis treatment time T_{B2} , the at least one receiving unit contains the pre-set residual volume of the at least one dialysing fluid concentrate, the method further comprising:
discharging the pre-set residual volume of the at least one dialysing fluid concentrate to waste.
37. (Previously Presented) The method of claim 19, wherein at the end of the remaining dialysis treatment time T_{B2} the at least one receiving unit is empty.
38. (Previously Presented) The method of claim 19, further comprising:
testing the dialysis unit before the commencement of the dialysis treatment time, the testing comprising:
determining a volume of the at least one dialysing fluid concentrate in the at least one receiving unit before the commencement of the dialysis treatment time over a pre-set time interval T_{test} from the pre-set volume of the at least one dialysing fluid concentrate at the

commencement of the dialysis treatment time and a volume of the at least one dialysing fluid concentrate used during the pre-set time interval T_{test} .

39. (Previously Presented) The apparatus of claim 26, further comprising:

means for discharging the pre-set residual volume of the at least one dialysing fluid concentrate to waste via a waste discharge outlet;

wherein at the end of the remaining dialysis treatment period T_{B2} the at least one receiving unit contains the pre-set residual volume of the at least one dialysing fluid concentrate, and

wherein the control and calculating unit is configured such that at the end of the remaining dialysis treatment period T_{B2} , the pre-set residual volume is capable of being discharged to the waste discharge outlet.

40. (Previously Presented) The apparatus of claim 26, wherein at the end of the remaining dialysis treatment period T_{B2} , the at least one receiving unit is empty.